

REMARKS

The Applicants have now had an opportunity to carefully consider the comments set forth in the Office Action mailed March 17, 2004 including the Examiner's Interview Summary regarding the telephone interview of October 7, 2003.

In regard to the requirement, of the Interview Summary, that the substance of the interview must be included in the written reply to the last Office Action, the attention of the Examiner is directed to the Summary of Telephone Interview included on page 5 of the Amendment After Final transmitted by facsimile to the Examiner on October 8, 2003.

With regard to the substance of the Office Action mailed March 17, 2004, reexamination and reconsideration in view of the amendments and remarks made herein are respectfully requested.

The Office Action

In the Office Action mailed March 17, 2004:

claims 1, 5-7, 9, 15, 20 and 23 were rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 5,885,083 to Ferrell ("Ferrell");

claims 2-4 and 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of U.S. Patent No. 5,878,396 to Henton ("Henton");

claims 8 and 11-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of U.S. Patent No. 5,920,838 to Mostow et al. ("Mostow");

claims 21 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,017,219 to Adams, Jr. et al. ("Adams");

claims 10 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of Adams; and

claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of Henton and further in view of Adams.

The Present Application

By way of brief review, the present application is directed toward methods and systems for interactive language instruction. Significantly, the systems and methods provide for flexible lesson production in that they support repurposing other materials,

such as, news stories, web content and specialized documents (page 9, line 29 - page 10, line 2). Other features and functions that support interactive learning include the display of visual aids, such as an animated image of a human head and face. For example, the face and head are portrayed in a 3-dimensional perspective which is adjustable. That is, the image can be rotated and tilted for view from various angles. Accordingly, the student can observe characteristics of facial and mouth movements and the placement of the tongue, lips and teeth. For instance, the student can observe the animated image from any angle. Normal or transparent modes allow the student to observe teeth and tongue placement associated with the pronunciation of text being converted to speech by the system. Volume, speed and vocal characteristics associated with the animated image can be changed by the student using a computer interface (page 10, line 31 - page 11, line 16). The systems and methods also provide a user interface for receiving utterances spoken by the user in response to a prompt to replicate the audible speech provided by the text to speech conversion. The received utterances are analyzed. For example, the utterances are compared to records of the audible speech or are processed and compared to the output of models such as predictive models, phoneme models, diphone or dynamically generated models (page 12, line 31 - page 13, line 13). Feedback is then provided to the student based on a comparison. For example, a confidence measure which may be correlated to customize scoring tables is provided to the student. Preferably, the feedback reflects the precision with which the user replicates the audible speech (page 13, lines 13-18).

The Cited References

In contrast, the primary reference of the Office Action to Ferrell allegedly discloses a system and method for multimodal interactive speech training. The method of Ferrell includes selecting a modality corresponding to various sensory stimuli to present non-native vocabulary elements to an individual to train the individual to immediately respond to a presented word, situation or data without performing a time consuming literal translation or other complex cognitive process. The system and method include speech synthesis, speech recognition, and visual representations of non-native vocabulary elements to promote rapid comprehension through neural linguistic programming of the individual (Abstract).

The Office Action asserts that Ferrell discloses a first module configured to

convert input text audible speech. However, while Ferrell includes a diagram block labeled speech synthesizer 74 (FIG. 3) and makes reference to a synthesized utterance (column 4, line 52), it is respectfully submitted that Ferrell does not disclose or suggest that such a synthesizer or synthesized utterance are associated with a conversion from text. As pointed out by the Office Action, the vocabulary library of Ferrell includes recorded digitized representations of vocabulary elements (column 7, lines 40-45 and FIG. 3). Ferrell discloses that a vocabulary element, such as word or phrase, is presented both visually and aurally to the individual in a native language or a non-native language (column 4, lines 33-57 and FIGS. 1 and 4). However, it is respectfully submitted that disclosure of displaying a word as text and playing a prerecorded digitized representation of that word is not disclosure of converting input text to audible speech as disclosed and claimed in the present application. The text to audible speech conversion processes of the present application allow for the repurposing of any text based document or electronic file without recording digitized representations of vocabulary elements associated with the new documents or files.

Additionally, the Office Action asserts that Ferrell discloses feedback based on a comparison of the utterances (of the user) to one of the audible speech and the model. However, while Ferrell mentions visual and aural feedback (column 5, line 12) and a confidence meter (column 8, lines 1-3 and FIG. 4) and that vocabulary elements may be used to evaluate the correctness of a response, it is respectfully submitted that Ferrell does not disclose or suggest that such an evaluation is based on a comparison of the utterance to one of the audible speech and the model.

Henton allegedly discloses a method and apparatus for synthetic speech in facial animation. It is respectfully submitted that the efforts of Henton are directed toward intelligent assistants which appear on a display device to instruct a user or tell the user about some event. It is respectfully submitted that Henton does not disclose or suggest using such an animation as a visual aid for improving foreign language pronunciation of a language student.

The Office Action asserts that Henton discloses a face and head which is a "transparent" line drawing and directs the attention of the Applicants to FIG. 3 of Henton in support of the assertion. However, FIG. 3 of Henton shows ten visemes with associated line drawings depicting the most salient features of the visemes (column 5, lines 4-5). The line drawings do not depict a transparent head. One cannot see the

position of teeth, or the position of a tongue in the line drawings of Henton. Furthermore, it is respectfully submitted that Henton does not disclose or suggest using the line drawings as part of an animation. Instead, it is submitted, Henton uses the line drawings as a means for emphasizing the differences between the ten photographic visemes of FIG. 3, for the purposes of the patent document.

Mostow allegedly discloses a reading and pronunciation tutor. A computer implementation includes a player for outputting a response. An input block implements a plurality of functions such as silence detection and speech recognition. The input block captures read material. A tutoring function compares the output of the speech recognizer to the text which was suppose to have been read and generates a response, as needed, based on information in a knowledge base and an optional student model. The response is output to the user through the player. A quality control function evaluates the captured read material and stores the captured material in the knowledge base under certain conditions (Abstract).

The Office Action asserts that Mostow discloses a reading and pronunciation tutor involving speech recognition, where an external application, such as a tutor for another domain, may dynamically supply text for the tutor to help the user read. However, it is respectfully submitted that a second tutor is not fairly read as a source outside of the interactive language instruction system.

Additionally, the Office Action appears to rely on Mostow for disclosure of a table storing mapping information between word subgroups and vocabulary words, a table storing mapping information between words and vocabulary words, a table storing mapping information between words and examples of parts of speech and of tables of punctuation. However, while Mostow does mention using a combination of a look up table and heuristic algorithms (column 10, lines 1-2), it is respectfully submitted that Mostow does not disclose or suggest the specific kinds of tables listed above.

Adams allegedly discloses a system and method for interactive reading and language instruction. The system uses a mechanism to permit a computer based instruction program in reading or language instruction to implement a shared reading program, wherein portions of the text are read by the student and portions by the computer itself. The proportion of text "read" by each participant and the pace at which the lesson progresses can each be automatically altered based upon the proficiency of the student. In addition, the system uses a computer instructor to share the task of

reading or language learning by modeling the task for the learner, variably controlling the amount of material that the student reads aloud based upon a computer assessment of the student's ability, helping the learner navigate through the instructional application, and participating in a joint performance that demonstrates the student's reading (Abstract).

The Office Action asserts that Adams discloses a module configured to recognize the utterances and provide feedback to the user based upon a comparison of the utterances to one of the audible speech in the model. However, while Adams discloses a feedback message database, it is respectfully submitted that Adams does not disclose or suggest that the feedback is based on a comparison of utterances to audible speech or a model.

Additionally, the Office Action points out that Adams discloses an animated character that asks the student questions, directs reading tasks, reads what the student does not read, and helps navigate student through the application via the lesson output means, including audio and optional visual outputs (column 2, lines 57-62). However, the Office Action stipulates that this disclosure does not specifically disclose a second module synchronized to the first module, the second module producing an animated image of a human face and head pronouncing the audible speech. Instead, the Office Action relies on Henton for this disclosure.

However, as explained above, Henton does not disclose or suggest an animated human face and head are a visual aid for helping a student to learn to pronounce words in a non-native language. In this regard, it is respectfully submitted that Henton does not remedy the deficiencies of Adams. Instead, it is respectfully submitted that Henton simply discloses a method for generating an animated character such as that referred to by Adams.

The Claims Are Not Anticipated

Claims 1, 5-7, 9, 15, 20 and 23 were rejected under 35 U.S.C. §102(a) as being anticipated by Ferrell.

In explaining the rejection of **claim 1**, the Office Action asserts that Ferrell discloses a first module configured to convert input text to audible speech in a selected language, the audible speech being patterned after a model. In support of this assertion, the Office Action refers to a speech synthesizer **74** and comments explaining

that a vocabulary library 68 includes recorded digitized representation of vocabulary elements. The Office Action also recites an explanation that a vocabulary element, such as a word or phrase is presented both visually and aurally to the individual in a native language or a non-native language.

However, it is respectfully submitted that none of the referenced portions of Ferrell disclose or suggest that the speech synthesizer, or any other portion of the system of Ferrell, converts input text to audible speech. It is further respectfully submitted that disclosure of displaying text of a word and playing a recorded digitized representation of the word does not constitute disclosure of converting text to audible speech. Instead, it is respectfully submitted that Ferrell appears to be a sort of language instruction system that requires the use of recorded speech as a model with which to compare a student's attempts to speak a language sought to be learned. In such systems, lesson preparation is labor intensive, requiring recording phrases, words, creating illustrations, photographs, video or other media and linking the recorded sound files with the images and the content of the lessons or providing a large database of alternative replies in dialog systems which are designed to replicate interactions with students for context based lessons (page 1, line 28 - page 2, line 6 of the present application). It is respectfully submitted that the present application is directed toward methods and systems that seek to avoid this labor intensive lesson preparation, thereby providing language instruction that is easily customizable to the needs of a particular student (page 2, line 7 - page 3, line 26).

Additionally, in further explanation of the rejection of **claim 1**, the Office Action asserts that Ferrell discloses a second module configured to recognize the utterances and provide feedback to the user, the feedback being comprised of a confidence measure reflecting a precision at which the user replicates the audible speech in the selected language based on a comparison of the utterances to one of the audible speech and the model. In support of this assertion, the Office Action references disclosure in Ferrell that responses are evaluated for correctness and appropriate feedback is presented to the user based on the correctness of the response, and that in the preferred embodiment of Ferrell, the feedback includes both visual and aural feedback. The visual feedback is provided by a needle gauge at the bottom of the screen. However, it is respectfully submitted that Ferrell does not disclose or suggest that the correctness is evaluated based on a comparison of the utterances to one of the

audible speech and the model. Rather, it is respectfully submitted that Ferrell is silent with regard to how correctness is determined.

For at least the foregoing reasons, **claim 1**, as well as **claims 2-15 and 20**, which depend therefrom, is not anticipated by Ferrell.

Furthermore, **claim 1** has been amended to recite a first module configured to receive repurposed input text from a repurposed source and convert the input text to audible speech in a selected language, the audible speech being patterned after a model. The amendment to **claim 1** is supported throughout the specification. For example, beginning on page 9, at line 29, the present application discloses an embodiment wherein a text to speech module (TTS) provides flexibility for lesson production in that it repurposes other materials, current events, news stories, web content, files, specialized documents, etc. and provides the ability to apply the application to special needs situations such as speech therapy where customized word practice is desirable. Additionally, original **claim 8** recited the system as set forth in **claim 1** wherein the input text is based on data received from a source outside of the system. In this regard, it is respectfully submitted that the amendment to **claim 1** should not require a new search.

Furthermore, it is respectfully submitted that Ferrell, Henton, Mostow and Adams do not disclose or suggest receiving the repurposed input text from a repurposed source. In addressing **claim 8**, the Office Action (page 10) points out that Mostow discloses that a tutor from another domain may dynamically supply text for the tutor to help the user to read. However, as will be addressed in greater detail below, it is respectfully submitted that transferring lesson information from one tutor to another is not fairly read as input text received from a source outside of the interactive language instruction system. Furthermore, even if the tutor for another domain of Mostow is considered to be outside the system, the text received from the tutor for another domain of Mostow is not repurposed text as disclosed in the present application and recited in **claim 1** as amended. It is respectfully submitted that reading and pronunciation instruction is the purpose of the text at both the tutor and the tutor for another domain. In this regard, the transferred text is not repurposed.

For at least these additional reasons, **claim 1**, as well as **claims 2-15 and 20**, which depend therefrom, is not anticipated by Ferrell and is not obvious in light of Ferrell, Henton, Mostow and Adams taken alone or in any combination.

Additionally, regarding **claim 5**, the Office Action asserts that Ferrell discloses a phoneme model. However, even if the assertion of the Office Action is correct, **claim 5** has been amended and no longer recites a phoneme model.

For at least this additional reason, **claim 5** is not anticipated by Ferrell.

In explaining the rejection of **claim 15**, the Office Action asserts that Ferrell discloses vocabulary library **68** includes digital representations of vocabulary elements. However, even if the vocabulary library of Ferrell is considered to be a specific pronunciation file, it is only one file. **Claim 15** recites files (plural).

For at least this additional reason, **claim 15** is not anticipated by Ferrell.

Furthermore, **claim 15** has been amended to recite that the system includes a plurality of specific pronunciation files, each file of the plurality providing information associated with a different accent, set of proper names, trademarks or technical words. Support for the amendment of **claim 15**, is found, for example, on page 10, lines 10-15 and in **claim 15** as originally filed. It is respectfully submitted that the amendment to **claim 15** is only clarifying in nature, as the meaning of the phrase --specific pronunciation files-- was in the application as originally filed. In this regard, the amendment to **claim 15** should not require a new search. It is respectfully submitted that Ferrell does not disclose or suggest a plurality of specific pronunciation files, each file of the plurality providing information associated with the different accent, set of proper names, trademarks or technical words.

For at least the foregoing additional reasons, **claim 15** is not anticipated by Ferrell.

Arguments similar to those submitted in support **claim 1** are submitted in support of **claim 23**. It is respectfully submitted that Ferrell does not disclose or suggest means for converting input text to audible speech.

For at least the foregoing reasons, **claim 23** is unanticipated by Ferrell.

The Claims Are Not Obvious

Claims 2-4 and 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of Henton.

In explaining the rejection of **claims 2, 16 and 17** the Office Action again asserts that Ferrell discloses converting input text to audible speech and feedback based on a comparison of the utterances to one of the audible speech and the model. In this

regard, arguments similar to those submitted in support of **claim 1** are submitted in support of **claims 16 and 17**. It is respectfully submitted that Ferrell does not disclose or suggest converting input text to audible speech or generating feedback based on a comparison of utterances to one of the audible speech and a model.

For at least the foregoing reasons, **claims 2, 16 and 17** as well as **claims 18 and 19** which depend from **claim 17**, are not anticipated and are not obvious in light of Ferrell and Henton taken alone or in any combination.

Additionally, in explaining the rejections of **claims 2, 16, and 17**, the Office Action stipulates that Ferrell does not disclose a second module synchronized to the first module, the second module producing an animated image of a human face and head pronouncing the audible speech. The Office Action relies on Henton for such disclosure.

However, it is respectfully submitted that the art does not provide a motivation to combine Ferrell with Henton. The Office Action suggests that the motivation is for the purpose of instructing a user. However, it is respectfully submitted that Ferrell provides means for instructing the user without burdening the system of Ferrell with the added overhead required to provide an animated face. For example, Ferrell automatically presents a lesson (column 8, line 32), and walks the user through a multi-sensory preview (column 5, lines 37-59), graphic training (column 5, lines 60-67), site recognition (column 6, line 1-5), word comprehension exercises (column 6, lines 6-24), graphic identification (column 6, lines 25-35), word choice (column 6, lines 36-44), memory recall (column 6, lines 45-59) and story completion (column 6, line 60-67) exercises.

Additionally, **claims 2, 16 and 17** have been amended to recite generating, or a module for producing, a visual pronunciation aid in the form of an animated image of a human face and head pronouncing the audible speech. Ferrell does not disclose or suggest a visual pronunciation aid of any kind. Henton does not cure this deficiency. Henton discloses an animated face. However, as explained above, in the general discussion of Adams, Henton does not disclose or suggest that such an animated face could or should be used to aid a language student in learning how to pronounce vocabulary elements. For the foregoing reasons, it is respectfully submitted that the only motivation for combining Ferrell and Henton is found in the present application. Therefore, the rejections of **claims 2-4 and 16-18** are based on impermissible

hindsight.

For at least the foregoing reasons, **claim 2**, as well as **claims 3 and 4**, which depend therefrom, **claim 16**, and **claim 17**, as well as **claims 18 and 19**, which depend from **claim 17**, are not anticipated and are not obvious in light of Ferrell and Henton taken alone or in any combination.

Additionally, **claim 3** recites the animated image of the human face and head portrays a transparent face and head. In this regard, the Office Action asserts that Henton discloses a face and head which is “transparent” and makes reference to the line drawings shown in FIG. 3 of Henton. However, as explained above, the line drawings of FIG. 3 are simply that, line drawings. They do not depict a transparent head. They do not better enable an observer to determine relative positions of lips, teeth and tongue while pronouncing vocabulary elements. Indeed, Henton does not disclose or suggest that the line drawings be used as an animation. Instead, the line drawings are simply a tool used for the purpose of the patent document to emphasize the most salient features of the ten visemes of FIG. 3 (column 5, lines 3-5).

For at least the foregoing additional reasons, **claim 3** is not anticipated and is not obvious in view of Ferrell and Henton taken alone or in any combination.

In explaining the rejection of **claim 4**, the Office Action asserts that Ferrell must implicitly include a volume control for speakers 76. The Applicants respectfully disagree. It is respectfully submitted that Ferrell does not disclose or suggest a volume control. Nevertheless, **claim 4** has been amended to recite wherein the first and third modules further include controls to control one of the speed of the animated image and the audible speech, and the vocal characteristics of the audible speech. **Claim 4** no longer makes reference to a volume control. It is respectfully submitted that Ferrell does not disclose or suggest controlling the speed of audible speech or of an animated image associated therewith. Furthermore, it is respectfully submitted that Ferrell does not disclose or suggest a control to control the vocal characteristics of the audible speech.

For at least the foregoing additional reasons, **claim 4** is not anticipated and is not obvious in light of Ferrell and Henton taken alone or in any combination.

In explaining the rejection of **claim 18** the Office Action asserts that Ferrell discloses lessons and a vocabulary library and characterizes these as “stored lesson files”. However, **claim 18** has been amended to recite the methods set forth in **claim**

17 further comprising receiving the input text from a repurposed source via one of a network, a scanner, and the internet. **Claim 18** no longer makes reference to a stored lesson file. It is respectfully submitted that Ferrell does not disclose or suggest receiving input text from a repurposed source via a network, a scanner or the internet.

For at least these additional reasons, **claim 18** is not anticipated and is not obvious in light of Ferrell and Henton taken alone or in any combination.

The subject matter currently recited in **claims 4 and 18** was included in the claims as originally filed. Therefore, it is respectfully submitted that the amendments to **claims 4 and 18** should not require a new search.

Claims 8 and 11-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of Mostow. However, **claim 1**, from which **claim 8** depends, has been amended to incorporate subject matter similar to that cited in original **claim 8**. Therefore, **claim 8** has been amended to recite the system set forth in **claim 1** wherein the system further comprises a mapping of sub-words in a first language to sub-words in a second language, for illustrating sound alike comparisons to the student. Support for this amendment to **claim 8** can be found, for example, on page 5, lines 7-13, and on page 19, lines 10-18. It is respectfully submitted that Ferrell, Henton, Mostow and Adams do not disclose or suggest a mapping of sub-words in a first language to sub-words in a second language for illustrating sound alike comparisons to a student, whether taken individually or in any combination.

For at least the foregoing reasons, **claim 8** is not anticipated and is not obvious in light of Ferrell, Henton, Mostow and Adams taken alone or in any combination.

In explaining the rejections of **claims 11-13** the Office Action stipulates that Ferrell omits disclosure of a table storing mapping data between word sub-groups and vocabulary words, between words in vocabulary words, and between words and examples of parts of speech. In this regard, the Office Action relies on Mostow. However, it is respectfully submitted that Mostow only makes one reference to a look-up table (column 10, line 2) and does not explain what information is contained within the table look-up. Instead, Mostow discloses some combination of table look-up and heuristic algorithms to: determine letter-sound correspondence; decompose words into syllables; decompose words into onsets and rhymes; identify sets of words that rhyme with each other and identify words that look alike (column 10, lines 1-8). It is respectfully submitted that Mostow does not disclose or suggest tables storing mapping

data between word sub-groups and vocabulary words, between words and vocabulary words and between words and examples of parts of speech.

For at least the foregoing reasons, **claims 11-13** are not anticipated and are not obvious in light of Ferrell and Mostow taken alone or in any combination.

Regarding **claim 14** the Office Action stipulates that Ferrell omits tables of punctuation. However, the Office Action asserts that Mostow discloses that the tutoring function takes account of phrase boundaries as indicated by commas and certain other punctuation for the purpose of more accurately aligning recognition results against the text. However, it is respectfully submitted that disclosure of taking account of phrase boundaries as indicated by commas and certain other punctuation does not disclose or suggest inclusion of tables of punctuation.

For at least the foregoing additional reason, **claim 14** is not anticipated and is not obvious in light of Ferrell and Mostow taken alone or in any combination.

Claims 21 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Adams in view of Henton. In explaining these rejections the Office Action asserts that Adams discloses a third module configured to recognize the utterances and provide feedback to the user, the feedback being comprised of at least one other score, an icon and an audio segment reflecting a precision at which the user replicates the speech and selected language based on a comparison of the utterances to one of the audible speech and model. In support of this assertion, the Office Action directs the attention of the Applicants to speech recognition interface 2 and its recognition of user input, and to disclosure that correct input may be actively acknowledged by audio output. However, the referenced sections do not disclose or suggest that the feedback is based on a comparison of the utterances to the audible speech or a model. It is respectfully submitted that Adams does not disclose or suggest how feedback is determined or upon what feedback is based.

Additionally, in explaining the rejection of **claims 21 and 22** the Office Action makes reference to disclosure of Adams that an executive program generates a computer instructor, perhaps an animated character. However, the Office Action stipulates that Adams does not disclose a second module synchronized to the first module, the first module producing an animated image of a human face and head pronouncing the audible speech. The animated character of Adams asks the student questions, directs reading tasks, reads what the student does not read, and helps

navigate the student through the application via the lesson output means (column 2, lines 59-61). Adams does not disclose or suggest that an animated character be used as a visual aid to show a student the proper orientation of the lips, teeth and tongue for pronouncing various language elements. The Office Action relies on Henton for this disclosure. However, it is respectfully submitted that Henton does not remedy the deficiency of Adams. Instead, Henton describes a method for generating an embodiment of an animated character such as the one described by Adams. Henton does not disclose or suggest that the animated face of Henton should or could be used as a visual aid.

For at least the foregoing reasons, **claims 21 and 22** are not anticipated and are not obvious in light of Adams and Henton taken alone or in any combination.

Furthermore, **claim 21** has been amended to recite a second module synchronized to the first module, the second module producing a visual aid in the form of an adjustable animated image of a human face and head illustrating at least one of appropriate placement and movement of at least one component of the human head while pronouncing the audible speech. Support for the amendment of **claim 21** is found throughout the specification. For example, page 10, line 31-page 11, line 6 explain that in one embodiment, the animated image of the face and human head portrays a three-dimensional perspective and the image has the capability of being rotated, tilted, etc. for full view from various angles. Accordingly, the student can observe characteristics of facial and mouth movements, and placement of the tongue, lips and teeth during speech examples.

Claim 22 has been amended to recite generating a visual aid in the form of an adjustable animated image of a face and head illustrating at least one of appropriate placement and movement of at least one component of the human head pronouncing the audible speech. It is respectfully submitted that the amendment to **claim 22** is also supported by the subject matter described on page 10, line 31 - page 11, line 6.

It is respectfully submitted that Adams and Henton do not disclose or suggest producing or generating a visual aid in the form of an adjustable animated image of a human face and head illustrating at least one of appropriate placement and movement of at least one component of the human while pronouncing the audible speech.

For at least the foregoing additional reasons, **claims 21 and 22** are not obvious in light of Adams and Henton taken alone or in any combination.

Claims 10 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of Adams. However, **claim 10** depends from **claim 1** and is patentable for at least that reason. **Claim 24** depends from **claim 23** and is patentably distinct and is not obvious for at least that reason.

Claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ferrell in view of Henton and further in view of Adams. However, **claim 19** depends from **claim 17** and is patentably distinct and is not obvious for at least that reason.

Telephone Interview

In the interests of advancing this application to issue the Applicant(s) respectfully request that the Examiner telephone the undersigned to discuss the foregoing or any suggestions that the Examiner may have to place the case in condition for allowance.

CONCLUSION

Claims 1-24 remain in the application for at least the reasons cited above, the application is in condition for allowance. Accordingly, an early indication thereof is requested.

Respectfully submitted,

FAY, SHARPE, FAGAN,
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September 16, 2004
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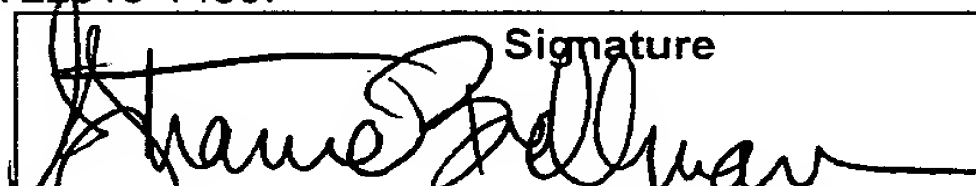
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